

Simple OSA-Link Cable

The Scisys Leonardo and Saitek Galileo and Renaissance chess computers could be connected to a PC via an OSA-Link cable. Such a cable is needed to run the OSA-4-Arena software and other tools. This document bases on the descriptions in the “OSA-Link cable clone” document, the knowledge of this document is presumed.

Since some time special USB-to-TTL cable converters are available from different manufactures. They include a USB-RS232 interface and add a COM-interface to any computer with USB-interface, drivers are available for most modern operating systems, Windows 7 (32 and 64 bit) recognises the cables directly. These cables also include a RS232-TTL interface and are a complete replacement for a single USB-RS232 cable and a TTL-converter (like Pollin).

Vendor is FTDI for example with the TTL-232RG series, they offer a complete interface including power, RTS and CTS.



Another vendor is Prolific with the PL2303(HX) series, this cables offer only GND, RxD and TxD in most cases, but they are sufficient for the OSA interface and cheaper.

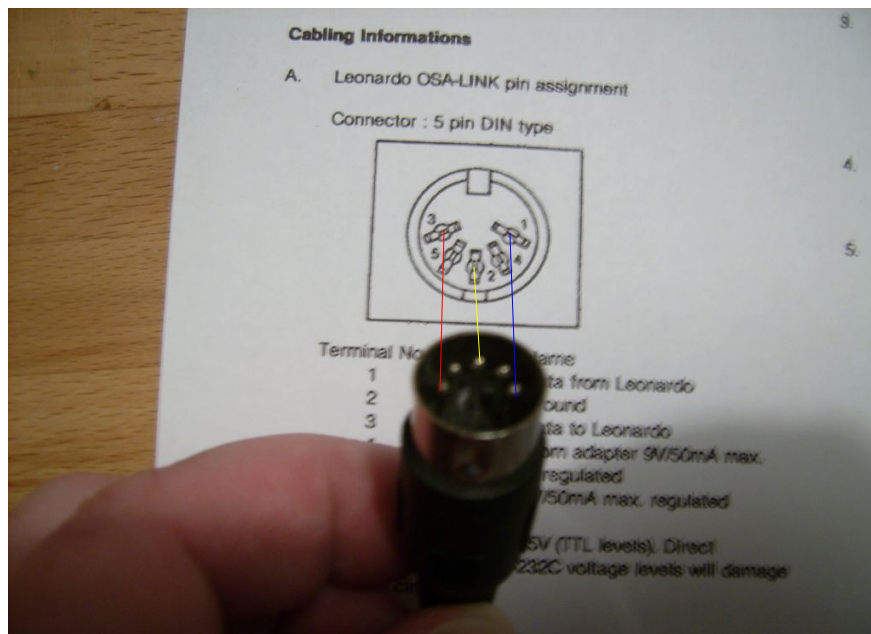


In this decription I use a PL2303 cable with the following connections:

Description	Colour
TxD	green
GND	black
RxD	white

The notation of the cable is from the TTL point of view, you can connect it to the OSA interface directly, no crossover is needed.

Take a 5-pol-DIN cable, cut off one plug and strip the wires. Then check which wire (different colour) is connected with what pin at the DIN-plug. Check that the plug is in the correct orientation with the OSA-plug layout.



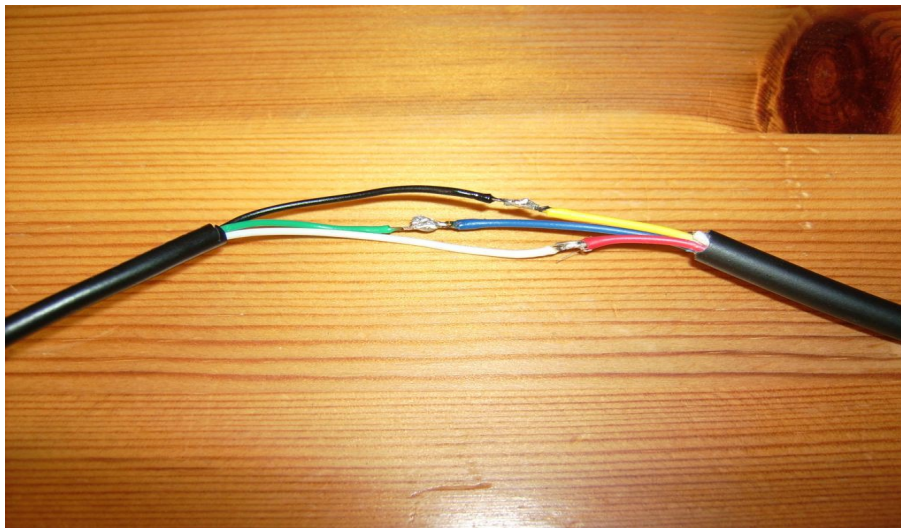
Use a measurement device to find out the cable connection and write it down!

The 5-pol-DIN cable that I got has the following connections:

PIN-No.	Description	Colour
1	TxD	blue
2	GND	yellow
3	RxD	red

The wires to pin 4 and 5 are not used and can be cut off. The colours may vary from manufacturer to manufacturer, even if you buy it from the same vendor. So please check the cable connections carefully! The colours of your cable may be different from the example above.

Connect the relevant cables from the 5-pol-DIN to the corresponding cables of the USB-TTL cable, a good idea is to use different length of the cables so that they cannot contact a the solder joints.



Connect:

Description	Colour USB-TTL	Colour 5-pol-DIN
TxD	green	blue
GND	black	yellow
RxD	white	red

Another hint is to use a shrinkdown plastik tube that should be slipped over before soldering.



After heating the plastik tube you will get a fine OSA-Link cable...



That's all, now you have your own OSA-Link cable and can use all of the available software for your chess computer. Have fun!

Note:

All informations are provides 'as is' and there are no guarantees for the hardware. I'm not responsible for any damage that may occur, using such a cable is at your own risk.